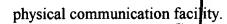
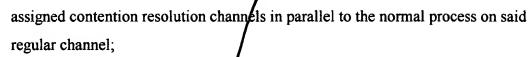


A method of parallel operation in a multiple access network having a plurality of communicating nodes and communication network facilities comprising the steps of:

- (a) allocating a plurality of communicating channels in addition to a regular communicating channel some of which may be used as spare contention resolution channels;
- (b) assigning from said plurality of communicating channels dynamically to communicating nodes which have implemented improved protocol for contention resolution process;
- (c) switching to assigned contention resolution channels upon detecting contention for nodes which have implemented improved protocol and involved in said contention;
- (d) staying on said original channel for nodes which have not implemented improved protocol or have not involved in said contention;
- (e) performing contention resolution process on said assigned contention resolution channels in parallel to the normal process on said regular channel;
- (f) reverting back to said regular channel upon completion of contention resolution process for said nodes which have switched to assigned contention resolution channel; and
- (g) resuming normal process.
- 2. In a method of parallel operation in a multiple access network according to claim 1, said step of allocating contention resolution channel comprising the step of allocating using dedicated time slots.
- 3. In a method of parallel operation in a multiple access network according to claim 1, said step of allocating contention resolution channel comprising the step of allocating using separate frequency band.
- 4. In a method of parallel operation in a multiple access network according to claim 1, said step of allocating contention resolution channel comprising the step of allocating using coding scheme.
- 5. In a method of parallel operation in a multiple access network according to claim 1, said step of allocating contention resolution channel comprising the step of allocating using separate



- 6. In a method of parallel operation in a multiple access network according to claim 1, said step of allocating contention resolution channel comprising the step of ensuring compatibility and non-interference with said regular communicating channel.
- 7. In a method of parallel operation in a multiple access network according to claim 1, said step of staying on said original charnel comprising the step of maintaining the operation of existing protocol for communicating nodes which have not implemented the improved protocol or have not been involved in said contention.
- 8. In a method of parallel operation in a multiple access network according to claim 1, said step of performing contention resolution process comprising the step of implementing an improved contention resolution protocol.
- 9. In a method of parallel operation in a multiple access network according to claim 1, said step of performing contention resolution process comprising the step of maintaining the existing protocol as on said regular channel.
- 10. An apparatus/of parallel operation in a multiple access network having a plurality of communicating nodes and communication network facilities comprising:
  - (a) allocating means for allocating a plurality of communicating channels in addition to a regular communicating channel some of which may be used as spare contention resolution channels;
  - (b) assigning means for assigning from said plurality of communicating channels dynamically to communicating nodes which have implemented improved protocol for contention resolution process;
  - (c) switching means for switching to assigned contention resolution channels upon detecting contention for nodes which have implemented improved protocol and involved in said contention;
  - (d) means for staying on said original channel for nodes which have not implemented improved protocol or have not involved in said contention;
  - (e) contention resolution means for performing contention resolution process on said



- (f) reverting meaning for switching back to said regular channel upon completion of contention resolution process; and
- (g) resuming means for resuming normal process.

add as>